CLAIMS

What is claimed is:

[00043] 1. A plain old telephone service (POTS) extender for at least one conductor pair for providing packets to a packet network and receiving packets from the packet network comprising:

a subscriber line interface circuit (SLIC) having a connection to the at least one conductor pair, said SLIC having a upstream voice signal output and a downstream voice signal input;

a codec for converting the upstream voice signal output to a upstream digital voice signal output and converting a downstream digital voice signal input to the downstream voice signal;

a vocoder for converting the upstream digital voice signal output to a first data stream and for converting a second data stream to the downstream digital voice signal input;

a packet assembler and disassembler (PAD) for converting the first data stream into a first at least one packet and for converting a second at least one packet into the second data stream, said PAD coupled to the packet network, said PAD having at least one network address; and

an output means for transmitting a master DSL modem control signal based on a fallback signal carried by the at least one conductor pair.

[00044] 2. The POTS extender of claim 1, wherein the output means further comprises:

a loop current detector having a connection to the at least one conductor pair, said loop current detector providing the master DSL modem control signal.

[00045] 3. The POTS extender of claim 1 wherein the SLIC further comprises:

a telephony current source;

switch hook detector; and

a ringing signal source.

[00046]   4.   The POTS extender of claim 1 further comprising:

a master DSL modem having at least one network address and connected to the at least one conductor pair.

[00046]   5.   The local loop circuit of claim 4 wherein the at least one network address comprises at least one asynchronous transfer mode virtual circuit.

[00047]   6.   The POTS extender of claim 1 wherein the at least one network address comprises at least one asynchronous transfer mode virtual circuit.

[00048]   7.   A DSL suppression circuit for suppressing DSL modem operation on a local loop comprising:

a loop current detector for sensing current drain on the local loop;

a means for providing a suppression signal controllable by said loop current detector; and

a master DSL modem operative coupled to the SLIC, said master DSL modem operating in a quiescent state upon receiving the suppression signal.

[00049]   8.   The DSL suppression circuit of claim 7 wherein the means for providing a suppression signal comprises:

a relay operable on a removal of power to connect a voice conductor pair to the local loop.

[00050]   9.   A method for providing a customer premise line connection to a DSL modem comprising the steps of:

detecting whether the line has a off-hook condition or an on-hook condition; and

energizing a relay to couple the customer premise line to the DSL modem, providing the line has an on-hook condition.

[00051]   10.   The method of claim 9 wherein the step of detecting an off-hook condition comprises the step of sensing current drain.

[00052]   11.   The method of claim 9 further comprising the step of booting up a processor.

[00053]   12.   The method of claim 9 wherein the step of energizing a relay comprises connecting the line to at least one subscriber line interface circuit (SLIC).

[00054] 13. The method of claim 12 wherein the step of energizing a relay comprises connecting the DSL modem to a subscriber line.